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PACIFIC SOUTHWEST FOREST AND RANGE EXPERIMENT STATION
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RESEARCH NOTE

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COMPUTER PROGRAM AVAILABLE FOR CONSTRUCTING STREAMFLOW RATING TABLES

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Rating tables give the solution to a single-variable power function for a range of values of the independent variable. In this Station's watershed management research such tables are used to compute the quantity of water which flows through a flume or over a weir, given the height of the stream at a specific time.

An IBM 704 Computer Program has been developed to construct these rating tables. Such tables can be of any desired length, and as many as necessary can be run at one time.

The general equation

$$Q = \alpha + (X + \gamma)^{\beta}$$

is solved for Q in terms of X, starting at the point $X = -\gamma$. The X's are incremented by .001 and the corresponding Q's are printed out in table form. The number of values is determined by the maximum value of X. α, β, and γ are constant terms which are set for any particular table.

A copy of the FORTRAN program deck, the BCD program deck, and operating instructions can be obtained by writing to the:

Director
Pacific Southwest Forest and Range Experiment Station
P. O. Box 245
Berkeley 1, California

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